



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,930	02/27/2004	David Martyn Roessler	GP-302457	9546
7590	10/18/2005		EXAMINER	LEE, GUNYOUNG T
KATHRYN A MARRA General Motors Corporation Mail Code 482-C23-B21, Legal Staff P.O. Box 300 Detroit, MI 48265-3000			ART UNIT	PAPER NUMBER
			2875	
DATE MAILED: 10/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/788,930	ROESSLER, DAVID MARTYN
	Examiner	Art Unit
	Gunyoung T. Lee	2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is FINAL.                            2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4)  Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-20 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \* c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>02/27/2004</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. A preamble is not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure (see MPEP § 2111). The information in the preamble is not further given any patentable weight.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Benavides (US 5,053,930).
4. In regards to claims 1-3, Benavides discloses phosphorescent vehicle interior parts (col. 6, lines 59-61) having:

- A phosphorescent material and a polymer matrix (col. 6, lines 51-54);
- Wherein the phosphorescent material is dispersed within the polymer matrix (col. 6, lines 50-61);
- Wherein the phosphorescent material is disposed on at least one surface of the polymer matrix (col. 6, lines 50-61).

5. Claims 1-3 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Britt et al. (US 4,401,050).

6. In regards to claims 1-3 and 9-10, Britt et al. disclose a phosphorescent escape route indicator:

- A phosphorescent material (Fig. 2, 16) and a polymer matrix (12);
- Wherein the phosphorescent material (Fig. 2, 16) is dispersed within the polymer matrix (12);
- Wherein the phosphorescent material (Fig. 2, 16) is disposed on at least one surface (22) of the polymer matrix (12);
- A light transparent material (col. 4, lines 33-36);
- Wherein the light transparent material (Fig. 2, 12) transmits visible lights (having wavelengths of about 200 to about 800 nm) (col. 4, lines 33-36) & (col. 5, lines 28-31).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benavides (US 5,053,930) as applied to claim 1 above.

9. In regards to claims 4-7, Benavides discloses the invention substantially as claimed except for selecting the phosphorescent material as one of a non-oxide phosphor, an oxide phosphor, or a combination of both. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the phosphorescent material within a non-oxide phosphor, an oxide phosphor, or a combination of both, since those materials are well known and generally available to one of ordinary skill in the art as phosphorescent materials. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of the suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

10. Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benavides (US 5,053,930).

11. Benavides was discussed in the rejection of claim 1.

12. In regards to claims 11-13 and 16-17, Benavides further discloses that the phosphorescent vehicle part have:

- A light-conducting component (Fig. 1, 30, 28) disposed between a location external to the vehicle (20) and a point adjacent to the interior panel to transmit external light to the interior panel (col. 4, lines 38-41);
- Where in the light-conducting component (Fig. 1, 30, 28) comprises an existing window of the vehicle (20).

Therefore, Benavides discloses the invention substantially as claimed except for a roof wall extending between an interior portion and an exterior portion of a vehicle, and a

polymer matrix with a phosphorescent material disposed on the roof wall. However, Benavides discloses that the top of the vehicle (Fig. 1, 20) will be constructed with a sunroof (col. 4, lines 41-45) which extends between an interior portion and an exterior portion of the vehicle (20). Benavides also discloses that a molded plastic (polymer) part with a phosphorescent material will be positioned inside of the vehicle (20) to receive illumination from light sources outside the vehicle (col. 6, lines 50-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to place the molded plastic (polymer) part having a phosphorescent material on the sunroof (roof wall) to enhance the safety, convenience and pleasure of the driver with the illumination of the phosphorescent material during darkness.

13. In regards to claims 14 and 15, Benavides discloses the invention substantially as claimed except for selecting the phosphorescent material as one of a non-oxide phosphor, an oxide phosphor, or a combination of both. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the phosphorescent material within a non-oxide phosphor, an oxide phosphor, or a combination of both, since those materials are well known and generally available to one of ordinary skill in the art as phosphorescent materials. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of the suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

14. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benavides (US 5,053,930).

15. Benavides was discussed in the rejection of claims 1 and 11. In regards to claims 18-20, claims 18-20 are drawn to a lighting method corresponding to the apparatus of claims 1 and 11. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the polymer matrix with a phosphorescent material to provide light into the interior portion of a vehicle upon exposure to the external light source or upon discontinuation of the external light source to provide the improved safety, convenience and pleasure to the driver with the phosphorescent illumination effect during darkness.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benavides (US 4,928,212) and Ang et al. (US 6,209,933) show automotive parts made of polymer (plastic) matrix with a phosphorescent material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached between 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached at (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL  
10/17/2005



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800